

FRA Data Dictionary for External Use Grade Crossing Inventory System (GCIS) v2.5.0.0, Released: 12/28/2016

Document Revision Date: 12/28/2016

U.S. Department of Transportation Federal Railroad Administration

Office of Railroad Safety

DOT/FRA/RRS-23

Published: January 6, 2015 Effective: March 7, 2015 This page intentionally left blank

Revision Summary

Revision Date	Document Version #	Revision Class	Summary
03/06/2015	1.0	Major	Initial Availability
10/02/2015	1.1	Minor	Added Document Versioning
11/13/2015	2.0	Major	Updated field type for III.2.J, OthSgn2, and OthSgn3
12/18/2015	2.1	Minor	Updated Document Versioning
01/15/2016	3.0	Major	Updated Part III.4.C, III.6, and IV.6
02/12/2016	4.0	Major	Updated Data Model Changed CI_CrossingHeader from Lookup table to Data table
12/28/2016	4.1	Minor	Updated Document Versioning

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Section 1. Introduction

1.1. Purpose

GCIS v2.0 is a web-based application allowing Railroad, State, and Transit users the ability to directly submit crossing records through two methods, (1) a web user interface to include the ability to upload multiple records using an FRA preapproved Excel template and (2) a web Application Programming Interface (API). The data received are stored within a SQL Server database that has been redesigned and contains new schemas.

1.2. Background

The previous Grade Crossing Inventory System was designed over a decade ago by FRA using Visual Basic 6.0 (VB) with SQL Server and MS Access database backend. The system had two versions: GX32 and GCIS. GX32 was a VB application with an MS Access database backend and some Railroads and States used it to maintain and upload grade crossing data. The previous GCIS was a VB application with a SQL Server backend and was used by the FRA data entry team to process grade crossing inventory data. GCIS v2.0 replaced all previous versions and these legacy applications are retired.

1.3. Scope

This document provides a detailed explanation of all the data tables that is used in the GCIS v2.0 database. A brief summary of each table will be provided along with the column name, a description of each column, the value(s) that will be stored, field types, and the location of the field within the Grade Crossing Inventory Form (6180.71) (if applicable).

Section 2. Overview

At a high level, the GCIS v2.0 data model contains two main categories as follows:

- Crossing Records contains data consisting of all five parts of the Grade Crossing Inventory Form including the Header information
- Lookups stores all the lookup values used throughout the application

2.1. Data Model

The data model provides an overview of the GCIS v2.0 new database structure. The table prefixes are labeled with, CI_ to indicate that those tables capture crossing inventory information. The subsequent sections provides further explanation regarding each table in the GCIS database.

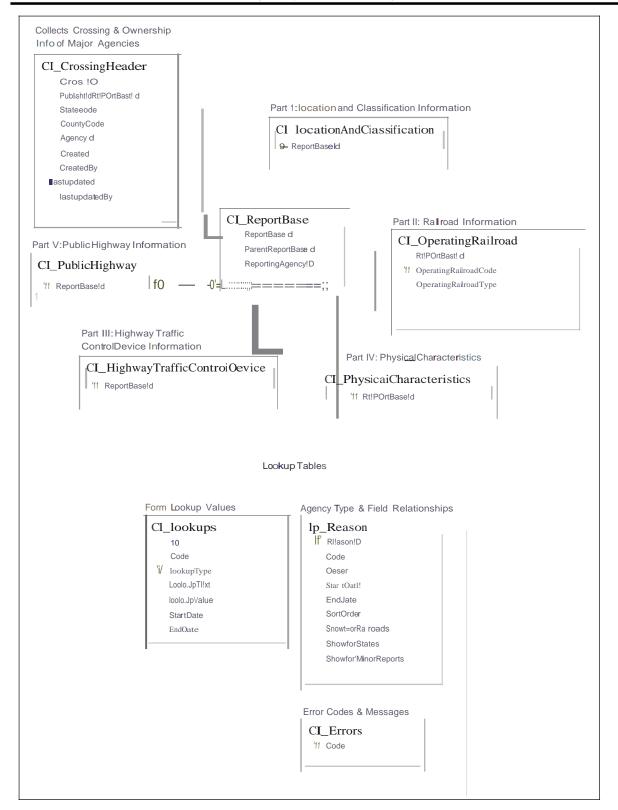


Figure2-1: GCIS v2.0LogicaiDataModel

2.2. Data Tables

2.2.1. Tables Storing Crossing Inventory Records

2.2.1.1. CI_CrossingHeader

This table contains data related to the crossing and ownership information of the Primary Operating Railroad agency.

Column Name	Description	Field Values	Type
AgencyId	The Reporting Agency Type ID from which the submission originated	1 = Railroad	int
		2 = State	
		3 = Transit	
		4 = FRA Internal	
CountyCode	The code assigned to each U.S. County		varchar(5)
CrossingID	Primary Key. Also the Crossing Inventory Number.		varchar(50)
PublishedReportBaseId	Foreign key to the CI_ReportBase table		int
StateCode	The code assigned to each U.S. State		varchar(5)
Created	Date for which the original submission was created		datetime
CreatedBy	Username of the user who originally submitted the records		varchar(50)
LastUpdated	Date for which the existing submission was modified		datetime
LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-1: Fields in CI_CrossingHeader

2.2.1.2. CI_HighwayTrafficControlDevice

This table stores information pertaining to Part III: Highway or Pathway Traffic Control Device Information of the Grade Crossing Inventory Form (6180.71). Detailed information regarding the table is described below.

Box No.	Column Name	Description	Field Values	Type
on Form				
III.2.D	AdvW10_1	Count of Advance Warning Signs W10-1 flag		numeric(1,0)
III.2.D	AdvW10_11	Count of Advance Warning Signs W10-11 flag		numeric(1,0)
III.2.D	AdvW10_12	Count of Advance Warning Signs W10-12 flag		numeric(1,0)
III.2.D	AdvW10_2	Count of Advance Warning Signs W10-2 flag		numeric(1,0)
III.2.D	AdvW10_3	Count of Advance Warning Signs W10-3 flag		numeric(1,0)
III.2.D	AdvW10_4	Count of Advance Warning Signs W10-4 flag		numeric(1,0)

Box No.	Column Name	Description	Field Values	Туре
on Form				
III.2.D	AdvWarn	Advance Warning Signs	0 = None	varchar(32)
			1 = W10-1	
			2 = W10-2	
			3 = W10-3	
			4 = W10-4	
			11 = W10-11	
			12 = W10-12	
III.3.F	AwdIDate	Installation Date of Current Active Warning Devices		varchar(6)
III.3.G	AwhornChk	Wayside Horn	1 = Yes	varchar(1)
			2 = No	
III.3.G	AwhornlDate	Wayside Horn Installed On (date)		varchar(6)
III.3.I	Bells	Number of Bells		numeric(2,0)
III.3.D	Bkl_FlashPost	Mast Mounted Flashing Lights: Back Lights Included	1 = Yes	varchar(32)
			2 = No	
III.3.C	CFlashType	Type of Cantilevered (or Bridged) Flashing Light	0 = None	varchar(32)
		Structures	1 = Incandescent	
			2 = LED	
III.2.G	Channel	Channelization Devices/Medians	1 = All Approaches	varchar(1)
			2 = One Approach	
			3 = Median – All Approaches	
			4 = Median – One Approach	
			5 = None	
III.2.I	EnsSign	ENS Sign Displayed	1 = Yes	varchar(1)
			2 = No	
III.2.H	Exempt	EXEMPT Signs	1 = Yes	varchar(1)
			2 = No	
III.3.C	FlashNov	Count of Cantilevered (or Bridged) Flashing Light		numeric(2,0)
		Structures Not Over Traffic Lane		
III.3.K	FlashOth	Other Flashing Lights or Warning Devices: Count		numeric(2,0)
III.3.K	FlashOthDes	Other Flashing Lights or Warning Devices: Specify type		varchar(256)
III.3.C	FlashOv	Count of Cantilevered (or Bridged) Flashing Light		numeric(2,0)
		Structures Over Traffic Lane		
III.3.E	FlashPai	Total Count of Flashing Light Pairs		numeric(2,0)
III.3.D	FlashPost	Mast Mounted Flashing Lights (count)		numeric(2,0)

Box No. on Form	Column Name	Description	Field Values	Туре
III.3.D	FlashPostType	Mast Mounted Flashing Lights Type	0 = None	varchar(32)
III.3.D	riasiirosti ype	Mast Mounted Flashing Lights Type	1 = Incandescent	varchar(32)
			2 = LED	
III.3.B	GateConf	Gate Configuration	1 = 2 Quad	varchar(32)
111.0.2		out comgutation	2 = 3 Quad	/ til
			3 = 4 Quad	
III.3.B	GateConfType	Type of Gate Configuration	4 = Full (Barrier) Resistance	varchar(32)
			6 = Median Gates	
III.3.A	GatePed	Count of Pedestrian Gate Arms		numeric(2,0)
III.3.A	Gates	Count of Roadway Gate Arms		numeric(2,0)
III.5	HwtrfPsig	Highway Traffic Pre-Signals	1 = Yes	varchar(1)
			2 = No	
III.5	HwtrfPsiglndis	Stop Line Distance (count)		numeric(3,0)
III.5	HwtrfPsigsdis	Storage Distance (count)		numeric(3,0)
III.4.A	HwynrSig	Does Nearby Hwy Intersection have Traffic Signals?	1 = Yes	varchar(1)
			2 = No	
III.3.H	HwyTrafSignl	Highway Traffic Signals Controlling Crossing	1 = Yes	varchar(1)
			2 = No	
III.4.B	Intrprmp	Hwy Traffic Signal Interconnection	1 = Not Interconnected	varchar(32)
			2 = For Traffic Signals	
*** 0 *		155 5 1 10	3 = For Warning Signs	1 (0.7.5)
III.2.L	Led	LED Enhanced Signs		varchar(256)
III.2.E	Low_Grnd	Low Ground Clearance Signs	1 = Yes	varchar(1)
шог	T C 10:	N 1 CI C 1CI C'	2 = No	: (2.0)
III.2.E	Low_GrndSigns	Number of Low Ground Clearance Signs	0. 37	numeric(2,0)
III.6	MonitorDev	Highway Monitoring Devices	0 = None	varchar(32)
			1 = Yes-Photo/Video Recording 2 = Yes-Vehicle Presence Detection	
III.1	NoSigns	Are there Signs or Signals?	1 = Yes	varchar(1)
111.1	Nosigiis	Are there signs of signals?	2 = No	varchar(1)
III.2.J	OthDes1	Specify Type of Other MUTCD Signs	2-110	varchar(10)
III.2.J	OthDes2	Specify Type of Other MUTCD Signs 2		varchar(10)
III.2.J	OthDes3	Specify Type of Other MUTCD Signs 3		varchar(10)
III.2.J	OthSgn	Other MUTCD Signs	1 = Yes	varchar(1)
			2 = No	(2)

Box No. on Form	Column Name	Description	Field Values	Type
III.2.J	OthSgn1	Number of Other MUTCD Signs		numeric(2,0)
III.2.J	OthSgn2	Number of Other MUTCD Signs 2		numeric(2,0)
III.2.J		Number of Other MUTCD Signs 3		, , ,
	OthSgn3		0. 14	numeric(2,0)
III.2.F	PaveMrkIDs	Pavement Markings	0 = None	varchar(32)
			1 = Stop Lines 2 = RR Xing Symbols	
			3 = Dynamic Envelope	
III.4.C	PrempType	Highway Traffic Signal Preemption	1 = Simultaneous	varchar(1)
111.1.0	1 Temp 1 ype	The first organization of the first of the f	2 = Advance	varenar(1)
III.2.K	PrvxSign	Private Crossing Signs	1 = Yes	varchar(1)
			2 = No	, ,
	ReportBaseId	Foreign Key to the CI_ReportBase table		int
III.3.D	Sdl_FlashPost	Mast Mounted Flashing Lights: Side Lights Included	1 = Yes	varchar(32)
			2 = No	
III.3.J	SpecPro	Non-Train Active Warning	0 = None	varchar(20)
			1 = Flagging/Flagman	
			2 = Manually Operated Signals 3 = Watchman	
			3 = watchman 4 = Floodlighting	
III.2.B	StopStd	Number of STOP Signs	4 = Floodinghting	numeric(1,0)
III.2.A	XBuck	Number of Crossbuck Assemblies		numeric(2,0)
III.2.C	YieldStd	Number of YIELD Signs		numeric(1,0)
111.2.0	WdCode	Warning Device Code		varchar(1)
				datetime
	Created	Date for which the original submission was created		
	CreatedBy	Username of the user who originally submitted the records		varchar(50)
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

 $Table \ 2-2: Fields \ in \ CI_Highway Traffic Control Device$

2.2.1.3. CI_LocationAndClassification

This table stores information pertaining to Part I: Location and Classification Information of the Grade Crossing Inventory Form (6180.71).

Box No.	Column Name	Description	Field Values	Type
on Form				

Box No. on Form	Column Name	Description	Field Values	Type
I.5	BlockNumb	Block Number		varchar(6)
I.4	CityCD	The code assigned to each U.S. City		varchar(10)
I.3	CntyCD	The code assigned to each U.S. County		varchar(10)
I.23	DevelTypID	Type of Land Use	11 = Open Space 12 = Residential 13 = Commercial 14 = Industrial 15 = Institutional 16 = Farm 17 = Recreational 18 = RR Yard	varchar(32)
I.6	Highway	Highway Type & No.		varchar(256)
I.26	HscoRrid	HSR Corridor ID		varchar(4)
I.35	HwyCont	State Contact (Telephone No.)		varchar(10)
I.27	Latitude	Latitude		varchar(256)
I.29	LLsource	Lat/Long Source	1 = Actual 2 = Estimated	varchar(1)
I.28	Longitude	Longitude		varchar(256)
I.7	MultFrmsFiled	Do Other Railroads Operate a Separate Track at Crossing?	1 = Yes 2 = No	varchar(1)
I.4	Nearest	In/Near	0 = In 1 = Near	varchar(1)
I.20	OpenPub	Public Access (If Private Crossing)	1 = Yes 2 = No	varchar(1)
I.33	PolCont	Emergency Notification Telephone No.		varchar(10)
I.19	PosXing	Crossing Position	1 = At Grade 2 = RR Under 3 = RR Over	varchar(1)
I.1	Railroad	The code associated with the Primary Operating Railroad		varchar(32)
	ReportBaseId	Foreign Key to the CI_ReportBase table		int
I.34	RrCont	Railroad Contact (Telephone No.)		varchar(10)
I.13	RrID	Line Segment		varchar(256)
I.15	RrMain	The code associated with the Parent Railroad		varchar(32)
I.32.A	RrNarr	Railroad Narrative		varchar(max)

Box No. on Form	Column Name	Description	Field Values	Type
I.30.A	RrNarr1	Railroad narrative A		varchar(256)
I.30.B	RrNarr2	Railroad narrative B		varchar(256)
I.30.C	RrNarr3	Railroad narrative C		varchar(256)
I.30.D	RrNarr4	Railroad narrative D		varchar(256)
I.8.	SameInd	Do Other Railroads Operate Over Your Track at Crossing?	1 = Yes 2 = No	varchar(1)
I.8.	SameRr1	The code associated with the Railroad selected in the 1st drop-down list for field I.8		varchar(32)
I.8.	SameRr2	The code associated with the Railroad selected in the 2nd drop-down list for field I.8		varchar(32)
I.8.	SameRr3	The code associated with the Railroad selected in the 3rd drop-down list for field I.8		varchar(32)
I.8.	SameRr4	The code associated with the Railroad selected in the 4th drop-down list for field I.8		varchar(32)
I.7	SepInd	Do Other Railroads Operate a Separate Track at Crossing?	1 = Yes 2 = No	varchar(1)
I.7	SepRr1	The code associated with the Railroad selected in the 1st drop-down list for field I.7		varchar(32)
I.7	SepRr2	The code associated with the Railroad selected in the 2nd drop-down list for field I.7		varchar(32)
I.7	SepRr3	The code associated with the Railroad selected in the 3rd drop-down list for field I.7		varchar(32)
I.7	SepRr4	The code associated with the Railroad selected in the 4th drop-down list for field I.7		varchar(32)
I.26	SfxHscoRrid	HSR Corridor ID Suffix		varchar(4)
I.2	StateCD	The code assigned to each U.S. States		varchar(2)
I.32.B	StNarr	State Narrative		varchar(max)
I.31.A	StNarr1	State narrative A		varchar(256)
I.31.B	StNarr2	State narrative B		varchar(256)
I.31.C	StNarr3	State narrative C		varchar(256)
I.31.D	StNarr4	State narrative D		varchar(256)
I.5	Street	Street or Road Name		varchar(256)
I.14	Ttstn	Timetable Station		varchar(6)
I.14	TtstnNam	Nearest RR Timetable Station		varchar(256)
I.21	TypeTrnSrvcIDs	Type of Train Service	11 = Freight 12 = Intercity Passenger 13 = Commuter 14 = Transit 15 = Shared Use Transit 16 = Tourist/Other	varchar(32)
I.17	TypeXing	Crossing Type	2 = Private 3 = Public	varchar(1)

Box No.	Column Name	Description	Field Values	Type
on Form				
I.25	Whistban	Quiet Zone	0 = No	varchar(1)
			1 = 24 hr	
			2 = Partial	
			3 = Chicago Excused	
I.25	WhistDate	Date Established (Quiet Zone)		datetime
I.24	XingAdj	Is there an Adjacent Crossing with a Separate Number?	1 = Yes	varchar(1)
			2 = No	
I.16	XingOwnr	Crossing Owner (RR ID)		varchar(32)
I.24	XngAdjNo	If Yes, Provide Crossing Number		varchar(7)
I.18	XPurpose	Crossing Purpose	1 = Highway	varchar(1)
			2 = Pathway, Pedestrian	
			3 = Station, Pedestrian	
	Created	Date for which the original submission was created		datetime
	CreatedBy	Username of the user who originally submitted the records		varchar(50)
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-3: Fields in CI LocationAndClassification

2.2.1.4. CI_OperatingRailroad

This table contains 2 Primary Keys consisting of the OperatingRailroadCode and OperatingRailroadType that distinctly identifies that the record is a Multiple Forms Filed (MFF) record and the ReportBaseId that is a foreign key to the CI_ReportBase table capturing the Header information. It also captures data for Part II: Railroad Information information of the Grade Crossing Inventory Form (6180.71).

Box No.	Column Name	Description	Field Values	Type
on Form				
I.11	Branch	Branch or Line Name		varchar(256)
II.1.A	DayThru	Total Daylight Thru Trains		numeric(3,0)
II.7.A	EMonitorDvce	Event Recorder	1 = Yes	varchar(1)
			2 = No	
II.7.B	HealthMonitor	Remote Health Monitoring	1 = Yes	varchar(1)
			2 = No	
II.4	IndustryTrk	Number of Industry tracks		numeric(2,0)
II.1.E	Lt1Mov	Check if Less Than One Movement Per Day	1 = Less Than One Movement Per Day	varchar(1)
			2 = One or More Movements Per Day	

Box No.	Column Name	Description	Field Values	Type
on Form				
I.22	Lt1PassMov	Average Passenger Train Count Per Day: Less Than One Per	1 = Yes	varchar(1)
11.4	MainTrk	Day Number of Main tracks	2 = No	
II.4				numeric(2,0)
II.3.B	MaxSpd	Typical Speed Range Over Crossing - MaxTypical Speed Range Over Crossing (maximum)		numeric(3,0)
II.3.A	MaxTtSpd	Maximum Timetable Speed		numeric(3,0)
I.12	MilePost	RR Milepost Number		varchar(8)
II.3.B	MinSpd	Typical Speed Range Over Crossing (minimum)		numeric(3,0)
II.1.B	NghtThru	Total Night time Thru Trains		float
	OperatingRailroadCode	Primary Key. The code associated with the Primary Operating Railroad		varchar(32)
	OperatingRailroadType	Primary Key. The type distinguishing whether the operating Railroad is the Primary, Operate a Separate Track, or Operate Over a Track	Primary = Primary Operating Railroad Samerr = Operate Over Your Track at Crossing Seprr = Operate a Separate Track at Crossing	varchar(10)
I.22	PassCnt	Average Passenger Train Count Per Day: Number per day		numeric(3,0)
I.12	PrfxMilePost	RR Milepost Prefix		varchar(3)
	ReportBaseId	Foreign key to the CI_ReportBase table		int
I.9	RrDiv	Railroad Division or Region		varchar(256)
I.10	RrSubDiv	Railroad Subdivision or District		varchar(256)
I.12	SfxMilePost	RR Milepost Suffix		varchar(3)
II.6	Sgnleqp	Is Track Signaled?	1 = Yes 2 = No	varchar(1)
II.4	SidingTrk	Number of Siding tracks		numeric(2,0)
II.5	SpselIDs	Train Detection	0 = None 11 = Constant Warning Time 12 = Motion Detection 14 = Other 16 = AFO 17 = PTC 18 = DC	varchar(32)
II.1.D	TotalLtr	Total Transit Trains		float
II.1.C	TotalSwt	Total Switching Trains		float
II.4	TransitTrk	Number of Transit tracks		numeric(2,0)
II.1.E	WeekTrnMov	How many Trains per Week?		float

Box No. on Form	Column Name	Description	Field Values	Туре
II.4	YardTrk	Number of Yard tracks		numeric(2,0)
II.2	YearTrnMov	Year of Train Count Data		float
	Created	Date for which the original submission was created		datetime
	CreatedBy	Username of the user who originally submitted the records		varchar(50)
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-4: Fields in CI_OperatingRailroad

CI_PhysicalCharacteristics

This table stores information pertaining to Part IV: Physical Characteristics of the Grade Crossing Inventory Form (6180.71).

Box No.	Column Name	Description	Field Values	Type
on Form				
IV.8	ComPower	Is Commercial Power Available?	1 = Yes	varchar(1)
			2 = No	
IV.3	Downst	Does Track Run Down a Street?	1 = Yes	varchar(1)
			2 = No	
IV.6	HwynDist	Approximate Intersecting Roadway Distance (feet)		numeric(4,0)
IV.6	HwyNear	Intersecting Roadway within 500 feet?	1 = Yes	varchar(1)
			2 = No	
IV.2	HwyPved	Is Roadway/Pathway Paved?	1 = Yes	varchar(1)
			2 = No	
IV.4	Illumina	Is Crossing Illuminated?	1 = Yes	varchar(1)
			2 = No	
	ReportBaseId	Foreign key to the CI_ReportBase table		int
IV.1	TraficLn	Number of Traffic Lanes Crossing Railroad		varchar(2)
IV.1	TraflnType	Traffic Lane Type	1 = One-way Traffic	varchar(1)
			2 = Two-way Traffic	
			3 = Divided Traffic	
IV.7	XAngle	Smallest Crossing Angle	$1 = 0^{\circ} - 29^{\circ}$	varchar(1)
			$2 = 30^{\circ} - 59^{\circ}$	
			$3 = 60^{\circ} - 90^{\circ}$	

Box No.	Column Name	Description	Field Values	Type
on Form				
IV.5	XSurfaceIDs	Crossing Surface	11 = 1. Timber	varchar(32)
			12 = 2. Asphalt	
			13 = 3. Asphalt and Timber	
			14 = 4. Concrete	
			15 = 5. Concrete and Rubber	
			16 = 6. Rubber	
			17 = 7. Metal	
			18 = 8. Unconsolidated	
			19 = 9. Composite	
*** -	TYG GD		20 = 10. Other (specify)	1 (5)
IV.5	XSurfDate	Crossing Surface Installation Date		varchar(6)
IV.5	XSurfLength	Crossing Surface Length		numeric(3,0)
IV.5	XSurfWidth	Crossing Surface Width		numeric(3,0)
IV.5	XSurOthr	Other Crossing Surface (description)		varchar(256)
	Created	Date for which the original submission was created		datetime
	CreatedBy	Username of the user who originally submitted the records		varchar(50)
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-5: Fields in CI_PhysicalCharacteristics

2.2.1.5. CI_PublicHighway

This table stores information pertaining to Part V: Public Highway Information of the Grade Crossing Inventory Form (6180.71).

Box No.	Column Name	Description	Field Values	Type
on Form				
V.7	Aadt	Annual Average Daily Traffic (AADT) Count		varchar(6)
V.7	AadtYear	Annual Average Daily Traffic (AADT) Year		varchar(4)
V.10	EmrgncySrvc	Emergency Services Route	1 = Yes	varchar(1)
			2 = No	
V.2	HwyClassCD	Functional Classification of Road at Crossing: Rural or Urban	0 = (0) Rural	varchar(1)
			1 = (1) Urban	

Box No.	Column Name	Description	Field Values	Type
V.2	HwyClassrdtpID	Functional Classification of Road at Crossing: Type of Highway/Roadway (ID)	11 = (1) Interstate 12 = (2) Other Freeways and Expressways 13 = (3) Other Principal Arterial	varchar(32)
			16 = (4) Minor Arterial 17 = (5) Major Collector 18 = (6) Minor Collector 19 = (7) Local	
V.4	HwySpeed	Highway Speed Limit		numeric(3,0)
V.4	HwySpeedps	Highway Speed Limit: Posted or Statutory	1 = Posted 2 = Statutory	varchar(1)
V.1	HwySys	Highway System	1 = (01) Interstate Highway System 2 = (02) Other Nat Hwy System (NHS) 3 = (03) Federal Aid, Not NHS 8 = (08) Non-Federal Aid	varchar(2)
V.6	LrsMilePost	LRS Milepost		varchar(256)
V.5	LrsRouteid	Linear Referencing System (LRS Route ID)		varchar(256)
V.8	PctTruk	Estimated Percent Trucks		varchar(2)
	ReportBaseId	Foreign key to the CI_ReportBase table		int
V.9	SchlBsCnt	Average Number School Bus Count per Day		numeric(3,0)
V.9	SchlBusChk	Regularly Used by School Buses?	1 = Yes 2 = No	varchar(1)
V.3	StHwy1	Is Crossing on State Highway System?	1 = Yes 2 = No	varchar(1)
	Created	Date for which the original submission was created		datetime
	CreatedBy	Username of the user who originally submitted the records		varchar(50)
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-6: Fields in CI_PublicHighway

2.2.1.6. CI_ReportBase

This table stores the Header information, as well as the crossing records where the Primary Operating Railroad selected the value of Yes for field I.7 Do Other Railroads Operate a Separate Track at Crossing? This means that the Primary Operating Railroad is listing up to four (4) additional railroads to submit their railroad and train count data. These submissions will be flagged with a value of 1 in the database, denoting that the record

is a Multiple Forms Filed (MFF) record. Detailed information regarding the table is described in the table below.

Box No. on Form	Column Name	Description	Field Values	Туре
D	CrossingID	DOT Crossing Inventory Number		varchar(20)
D	CrossingIdSuffix	Crossing ID suffix		varchar(20)
	MultipleFormsFiled	Multiple Forms Filed (boolean)	1 = Yes 2 = No	int
	ParentReportBaseId	Unique ID for all crossings in this table		int
A	PostmarkDate	Submission Date		Datetime
С	ReasonID	Reason for Update	14 = Change in Data 15 = New Crossing 16 = Closed 19 = Re-Open 20 = Date Change Only 21 = Change in Primary Operating RR 22 = Admin. Correction 23 = Quiet Zone Update 24 = No Train Traffic	int
	ReportBaseId	Foreign key to the CI_ReportBase table		int
	ReportingAgencyID	Reporting Agency ID		int
В	ReportingAgencyTypeID	Reporting Agency Type ID	1 = Railroad 2 = State 3 = Transit 4 = FRA Internal	int
	ReportStatus	The status of the submission	Bulk Upload Error Cancelled Expired Pending Published	varchar(20)
	ReportType	Major or Minor Railroad (used for MFF)	Major = Primary Operating Railroad Submitting the Full Crossing Inventory Record Minor = A Railroad agency submitting only the railroad and train count data	varchar(20)
A	RevisionDate	Revision Date		Datetime
	ValidationErrors	Stores all the error code(s) that failed validations		varchar(4000)
	Created	Date for which the original submission was created		datetime
	CreatedBy	Username of the user who originally submitted the records		varchar(50)

Box No. on Form	Column Name	Description	Field Values	Туре
	LastUpdated	Date for which the existing submission was modified		datetime
	LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-7: Fields in CI_ReportBase

2.2.2. Tables that Stores Lookup Values

2.2.2.1. CI_Errors

This table contains all the validation error messages that are returned by the system.

Column Name	Description	Field Values	Type
Code	Primary Key. Also the unique code assigned to each error.		varchar(10)
Description	The description of each error message		varchar(MAX)
Section	Stores the section name of the crossing inventory form	Header Part I: Location and Classification Information Part II: Railroad Information Part III: Highway or Pathway Traffic Control Device Information Part IV: Physical Characteristics Part V: Public Highway Information	
ShowForMinorReports	Indentify whether the error message should be returned for users submitting the short form (Railroad Data Only)	0 = True 1 = False	int
ShowForRailroads	Indentify whether the error message should be returned for Railroad users	0 = True 1 = False	int
ShowForStates	Indentify whether the error message should be returned for State users	0 = True 1 = False	int
SortOrder	Stores the sort order number		int
Created	Date for which the original error was created		datetime
CreatedBy	Username of the user who originally created the records		varchar(50)
LastUpdated	Date for which the existing error was modified		datetime
LastUpdatedBy	Username of the user who last modified the record		varchar(50)

Table 2-8: Fields in CI_Errors

2.2.2.2. CI_Lookups

This table contains all the valid values available when completing a crossing record.

Column Name	Description	Field Values	Type
Code	The unique code associated with each lookup type		varchar(50)
EndDate	The date in which the item is no longer active		datetime
ID	Primary Key		varchar(50)
LookupText	Description of the lookup value		varchar(500)
LookupType	The type of lookup		varchar(50)
LookupValue	The value the lookup is stored as in the database (compared to what is		varchar(50)
	displayed on the front-end UI)		
StartDate	The date in which the item was made active		datetime
Status	Active/Inactive	0 = Inactive	bit
		1 = Active	
Created	Date for which the original submission was created		datetime
CreatedBy	Username of the user who originally submitted the records		varchar(50)
LastUpdated	Date for which the existing submission was modified		datetime
LastUpdatedBy	Username of the user who last submitted the updated records		varchar(50)

Table 2-9: Fields in CI_Lookups

2.2.2.3. Lp_Reason

This table stores all the available values that will populate the drop-down list field in Box C. Reason for Update of the Grade Crossing Inventory Form (6180.71).

Column Name	Description	Field Values	Туре
ReasonID	Primary Key for this table		tinyint
Code	Unique code assigned to each item in this table		varchar(3)
Descr	The description of each reason for update		varchar(50)
StartDate	The date in which the item was made active		datetime
EndDate	The date in which the item was made inactive		datetime
SortOrder	Username of the user who originally submitted the records		int
ShowForMinorReports	Identify whether the error message should be returned for users submitting	0 = True	int
	the short form (Railroad Data Only)	1 = False	
ShowForRailroads	Identify whether the error message should be returned for Railroad users	0 = True	int
		1 = False	
ShowForStates	Identify whether the error message should be returned for State users	0 = True	int
		1 = False	

